

I was Adopted by Aliens

It's OK to fool people as long as you're doing that to teach them a lesson which will better their knowledge of how the real world works.¹

James Randi

About 2008, while I was substitute teaching at Culver City High School, I received a message on my mobile phone from the Vice Principal to call her as soon as possible. I gulped, and at lunchtime, made the call. She wanted to know if I had been telling students that I had been abducted by aliens and teaching students the “alien number system.”

This story began 15 years earlier, in the early 1990s, when I was substitute teaching in LA. I was monitoring students from the back of the room as they added and subtracted three-digit numbers and wondering if there could be anything more boring. I began to wonder if there were perhaps a better way to write numbers. After all, just five hundred years ago Europe had been using Roman numerals, I, II, III ..., and then had switched to 1, 2, 3, ..., which had been brought to Europe by Arab traders from India.

I spent about the next year researching and developing a better system of counting, using a base of twelve and entirely new symbols. (A base of twelve system is superior in most ways to a base of ten due to its having a greater number of factors. Also, it appears that nature often uses twelve, not ten. See my paper, “The Social Applications of Highly Composite Numbers” and my video “Numbers of The Future”). Could I really persuade people to switch from a base ten to a base twelve system?

I was helped in my development of new symbols by my previous job in the Air Force as a “human performance engineer.” Our team was charged with making sure the pilot could operate the aircraft while monitoring multiple information streams. We needed controls and displays easy to use and understand. Mistakes could be catastrophic. Imagine wanting to change the temperature and instead activating “bomb release.”

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|---|---|----|---|----|----|----|----|
| ○ | ① | 6 | ⊖ | 12 | ⊗⊗ | 18 | ⊗⊖ |
| 1 | ⊙ | 7 | ⊕ | 13 | ⊗⊙ | 19 | ⊗⊕ |
| 2 | ⊙ | 8 | ⊖ | 14 | ⊗⊖ | 20 | ⊗⊖ |
| 3 | ① | 9 | ⊙ | 15 | ⊗⊙ | 21 | ⊗⊙ |
| 4 | ⊙ | 10 | ⊙ | 16 | ⊗⊙ | 22 | ⊗⊙ |
| 5 | ⊙ | 11 | ⊖ | 17 | ⊗⊙ | 23 | ⊗⊙ |

When teaching math I could often finish the lesson plan rather quickly, and in the remaining time I began to show these numbers to students (in grades 2-12). I wrote on the board: **I, II, III** \diamond **1, 2, 3** \diamond ?. Then I explained that we had gone from Roman numerals to Hindu-Arabic numerals—why could we not go further? At first the students argued with me. “Look how far we have come with what we have!” they would exclaim. However, I persisted, and like Johnny Appleseed I began to spread the numbers throughout all the schools. One day, I walked into a

seventh grade class and one of the girls there already knew the numbers, having been taught them by her older sister!

I think my introduction of this new number system was good, regardless of whether it was ever really used, because it allowed them to see what a completely different system might actually look like and thereby see our own number system in a new light. I would also sometimes show

¹ In 1988, James Randi went to Australia with his partner Carlos where they teamed up with the TV show 60 Minutes and pretended that Carlos was a psychic to see if they could fool the media and the public.

videos, but perhaps I should not have been.

I realized that I had a responsibility as a teacher and scientist, and so I began to make the videos silly, thinking that people would now know they were fake. For example, I put a tin foil hat on my head and said it gave me protection from the aliens. Also, I offered to sell the tin foil hat for \$95.

Some people began to laugh at my jokes but others were persistent believers. The last video I made, number nine, was called “Critical Thinking.” A third-year high school student came up to me one day and said she had seen my series of nine videos and that she had totally believe them until she saw the last one.

Some people online were rather upset with me when I confessed the hoax. Some students would go tell their friends that their “sub had been abducted by aliens” (chuckle, chuckle), and these students would come into my classroom to ask about it. I had to explain that I was not really abducted. I also had some high school students tell me that I should take down the last Critical Thinking video. They said that I could get on Oprah, and make “piles of money.” I told them that my conscience would bother me.

In the second grade, I found that students were just beginning to think critically. So after discussing the “alien” numbers, I would sometimes ask how many of the students believed in Santa Clause. On average, I would guess about a third would believe, a third would not, and a third would be uncertain. I would then ask the believers what kind of *evidence* they had that Santa Clause really existed. They would give evidence like they had “set out some cookies the night before” and when they “got up in the morning they were half eaten,” but others in the class would dispute this rendition of events and say that their “parents had eaten them.” That would start a lively and very interesting debate with many personal stories. I remember after one debate like this I asked if everyone still believed in Santa Clause, and one young girl said, “Well, I did, but now I am not so sure.” I felt some satisfaction upon hearing this, but I also wondered if there were any laws against debunking Santa Clause to a second grader in a public school?

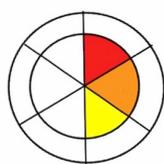
One day, I showed my numbers to a group of second graders and told them about being “adopted” by aliens. (The children that age always changed “abducted” to “adopted.”) They listened to my spiel quite spellbound, and then, at the end, I told them that I hadn’t really been adopted by aliens and that I had invented the numbers myself.

There was deep silence immediately after I said this. Their faces changed from fascination to deep disappointment, and they all stared up at me expectantly. I don’t know exactly why I did what I did next, but I shouted: “Ok, they really *did* adopt me! It’s a *true story!*” At which point they all burst into smiles and spontaneous applause. I just closed my eyes and sighed, thinking that perhaps humans were not genetically programmed to face the truth of certain things, or perhaps children needed these

What number is this?



Number Key



kind of stories. It shook my faith in my lack of faith.

After my abduction presentation, many of the high school students would ask me how I came up with the numbers. At first, I had no answer. Eventually I realized that they were asking about creativity. What makes someone creative? So I tried to explain that, to me, creativity involved having have a rather broad and deep knowledge base. One could then draw on this knowledge base and *combine elements* in new and interesting ways.

So what happened with the Culver City School administrator? I told her that, yes, I had told

some students that I had been abducted by aliens, and that I thought that they knew I was joking. She said she had heard good things about me, that the students liked me, and that she was looking at my online videos as we spoke. She said it seemed like I was just using a fun way to teach math, and I assured her that that's what I was doing. (By the way, Culver City is the home of Sony Pictures, and I think this school district is especially appreciative of creative storytelling.)

Then she wondered aloud what she would do if I *had* really thought that I was abducted by aliens. I think she was a little bored with her job and she secretly wished that I had really believed I was abducted by aliens. Once again, I felt I had disappointed someone who needed some extraordinary myth or story, or perhaps entertainment, in their life.

"Alien Numbers" spread further. A bit later I was at an elementary school in Culver City and a first-grader came up to me on the playground and said, "I saw you on YouTube," and then walked off, leaving me standing there somewhat stunned.²

² Several years later I developed colored versions of the numbers for digital use. <http://earth360.com/math-naturesnumbers.html>.